area and at the mid-breadth of the boat;

- (2) The length of the shaded area, measured along the centerline of the boat, is equal to 40 percent of the length of the passenger carrying area of the boat; and
- (3) The breadth of the shaded area, measured at the mid-length of the passenger carrying area, is equal to 40 percent of the breadth of the passenger carrying area of the boat.
- (d) Weight must be placed in the normal operating position of the motor and controls in lieu of this equipment. The quantity of weight used for this purpose depends upon the maximum rated horsepower of the boat being tested and is specified in Column 2 of Table 4 for the swamped weight of the motor and controls.
- (e) Permanent fuel tanks must be filled with fuel and each external opening into the fuel tank must be sealed.
- (f) The boat must be keel down in the water.
- (g) The boat must be swamped, allowing water to flow between the inside and the outside of the boat, either over the sides, through a hull opening, or both. Entrapped air in the flooded portion of the boat must be eliminated.

§ 183.322 Flotation materials

(a) Flotation materials must meet the requirements in §183.114 as listed in Table 183.114 when used in the bilge, unless located in a sealed compartment.

[CGD 77–145, 43 FR 56859, Dec. 4, 1978; 44 FR 47934, Aug. 16, 1979]

TESTS

§ 183.325 Flotation test for persons capacity.

Flotation standard. When the conditions prescribed in §183.320 are met, the boat must float in fresh, calm water as follows:

- (a) The angle of heel does not exceed $10\ degrees$ from the horizontal.
- (b) Any point on either the forward or aft reference area is above the surface of the water.
- (c) The reference depth at the reference area that is opposite the reference area that is above the surface of the water is 6 inches or less.

§183.330 Stability test.

- (a) Flotation standard. When the conditions prescribed in §183.320 (a), (d) through (g) and paragraphs (b) and (c) of this section are met, the boat must float in fresh, calm water as follows:
- (1) The angle of heel does not exceed 30 degrees from the horizontal.
- (2) Any point on either the forward or aft reference area is above the surface of the water.
- (3) The reference depth at the reference area that is opposite the reference area that is above the surface of the water is 12 inches or less.
- (b) *Quantity of weight used*. Load the boat with quantity of weight that, when submerged, is equal to the sum of the following:
- (1) One-half the quantity of weight required by \$183.320(b)(1).
- (2) The quantity of weight required by §183.320(b)(2).
- (c) Placement of quantity of weight: starboard side. Place the quantity of weight required by paragraph (b) of this section in the boat so that:
- (1) The quantity of weight required by \$183.320(b)(2) is positioned in accordance with \$183.320(c); and
- (2) One-half the quantity of weight required by §183.320(b)(1) is uniformly distributed over a distance along the outboard perimeter of the starboard side of the passenger carrying area that is equal to at least 30 percent of the length of the passenger carrying area so that the center of gravity of the quantity of weight is located within the shaded area illustrated in Figure 12, the center of gravity of the amount of weight placed on the floor of the boat is at least 4 inches above the floor and the center of gravity of the amount of weight placed on a seat is at least 4 inches above the seat. The location and dimensions of the shaded area are as follows:
- (i) The shaded area is centered at the mid-length of the passenger carrying area:
- (ii) The length of the shaded area is equal to 70 percent of the length of the passenger carrying area; and
- (iii) The breadth of the shaded area is 6 inches from:
- (a) For weights placed on the floor, the outboard perimeter of the passenger carrying area; and

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- (b) For weights placed on a seat, a vertical line inside the passenger carrying area as illustrated in Figure 13.
- (d) Placement of quantity of weight: port side. The quantity of weight required by paragraph (b)(1) of this section is placed along the port side of the passenger carrying area in accordance with the conditions prescribed in paragraph (c)(2) of this section.

§ 183.335 Level flotation test without weights for persons capacity.

When the conditions prescribed in §183.320 (a) and (d) through (g) are met,

the boat must float in fresh, calm water as follows:

- (a) The angle of heel does not exceed 10 degrees from the horizontal.
- (b) Any point on either the forward or aft reference area is above the surface of the water.
- (c) The reference depth at the reference area that is opposite the reference area that is above the surface of the water is 6 inches or less.

[CGD 75–168, 42 FR 20245, Apr. 18, 1977, as amended by USCG–1999–5832, 64 FR 34716, June 29, 1999]

Table 4—Weights (Pounds) of Outboard Motor and Related Equipment for Various Boat Horsepower Ratings

Boat horsepower rating	Motor and control weight		Battery weight		Full portable	4.0.5
	Dry	Swamped	Dry	Submerged	fuel tank weight	1+3+5
	Column No.					
	1	2	3	4	5	6
0.1 to 2	25	20				25
2.1 to 3.9	40	34				40
4.0 to 7	60	52			25	35
7.1 to 15	90	82	20	11	50	160
15.1 to 25	125	105	45	25	50	220
25.1 to 45	170	143	45	25	100	315
45.1 to 60	235	195	45	25	100	380
60.1 to 80	280	235	45	25	100	425
80.1 to 145	405	352	45	25	100	550
145.1 to 275	430	380	45	25	100	575
275.1 and up	605	538	45	25	100	750
TRANSOMS DESIGNED FOR TWIN MOTORS						
50.1 to 90	340	286	90	50	100	530
90.1 to 120	470	390	90	50	100	660
120.1 to 160	560	470	90	50	100	750
160.1 to 290	810	704	90	50	100	1000
290.1 to 550	860	760	90	50	100	1050
550.1 and up	1210	1076	90	50	100	1400

[CGD 83–012, 49 FR 39328, Oct. 5, 1984]